

## **REMARKS**

Applicant has amended claims 1 and 24. Applicant has amended claim 24 to change the word “wafer” to “substrate.” Applicant does not believe that this amendment will affect the allowance of claim 24, which has been previously allowed by the Examiner.

### **Claim Rejections – 35 U.S.C. § 102(b)**

The Examiner has rejected claims 1, 2, 4-5, 7, and 9 under 35 U.S.C. §102(b) as being anticipated by Gnade et al. (U.S. Patent 5,470,802). Applicants respectfully submit that claims 1, 2, 4-5, 7, and 9 are not anticipated by Gnade et al., because Gnade et al. do not anticipate all the elements of these claims.

With respect to independent claim 1, Applicant teaches and claims a process of lowering a parasitic capacitance between interconnect lines by forming a first dielectric layer and patterning the first dielectric layer such that a plurality of vertically oriented posts are formed, with each post having a top surface. The first dielectric layer has a dielectric constant. The process further comprises the formation of a second dielectric layer over and adjacent to the posts, where the second dielectric layer has a dielectric constant that is lower than the dielectric constant of the first dielectric layer. The posts are formed to provide a mechanical reinforcement of the bulk of the inter-layer dielectric material. The second dielectric layer is polished such that its top surface is substantially

even with the top surfaces of the posts. After the second dielectric layer is formed, an inlaid metal interconnection is formed in the second dielectric layer.

Gnade et al. teach a method for forming dielectric spacers in figures 8A-8D. Gnade et al. teach forming conductors (24) with dielectric spacers (58) on top of the conductors. This structure is formed by depositing a conductive layer, overlaying a dielectric layer, and patterning both layers with one mask. After the conductors and dielectric spacers are formed, a second dielectric (28) is deposited over conductors (24) and spacers (58). (Col. 8, lines 60-67; Col. 9, lines 1-10) The conductors formed by Gnade et al. are formed *before* the second dielectric layer is deposited.

Gnade et al. do not teach forming the conductors after forming the second dielectric layer, as taught by Applicant. Applicant teaches forming posts from a first dielectric layer and forming a second dielectric layer over and adjacent to the posts. After the second dielectric layer is formed, an inlaid metal interconnection is formed in the second dielectric layer. Because Gnade et al. does not teach forming the conductors after forming the second dielectric layer, and instead teaches forming the conductors before forming the second dielectric layer, Applicant respectfully submits that Gnade et al. do not anticipate all elements of independent claim 1.

Claims 2, 4-5, 7, and 9 are dependent upon independent claim 1. Thus, for at least the same reasons advanced above with respect to independent claim 1, Applicant respectfully submits that Gnade et al. does not anticipate all elements of these claims.

**Claim Rejections – 35 U.S.C. § 102(e)**

The Examiner has rejected claims 1-6 under 35 U.S.C. 102(e) as being anticipated by Wong (U.S. Patent 6,432,811).

Applicant believes that the 102(e) rejection is improper. The language of the statute reads, in part: “A person shall be entitled to a patent unless the invention was described in a patent granted on an application for patent *by another*.” Emphasis added by Applicant. The patent cited by the Examiner, Wong, U.S. Patent 6,432,811, was invented by Lawrence D. Wong, of Beaverton, OR, and is assigned to Intel Corporation. Applicant of the present application, U.S. Serial No. 09/745,705, is also Lawrence D. Wong of Beaverton, OR. Therefore, U.S. Patent 6,432,811 is not a patent granted on an application for patent *by another*, and the rejection is improper.

**Claim Rejections – 35 U.S.C. § 103(a)**

The Examiner has rejected claims 3 and 8 under 35 U.S.C 103(a) as being unpatentable over Gnade et al. (U.S. Patent 5,470,802) in view of Lin (U.S. Patent 6,297,554).

It is Applicant’s understanding that the cited references fail to teach or render obvious Applicant’s invention as claimed in claims 3 and 8.

Claims 3 and 8 are dependent upon independent claim 1. Thus, for at least the reasons advanced above with respect to independent claim 1, Applicant respectfully

submits that neither Gnade et al. nor Lin, individually or in combination, render these dependent claims obvious.

Applicant respectfully requests the removal of the 35 U.S.C. 102(a) rejection of claims 1, 2, 4-5, 7, and 9, the 102(e) rejection of claims 1-6, and the 103(a) rejection of claims 3 and 8, and seeks an early allowance of these claims.

If there are any additional charges, please charge Deposit Account No 02-2666.

Respectfully submitted,

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